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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,102	07/20/2000	Purushottam Yeluripati	BEL-003	2746

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EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/620,102

Applicant(s)

YELURIPATI ET AL.

Examiner

Charles E Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-19 are pending in this application.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.s. Pat. No. 6,629,128 B1 to Glass in view of U.S. Pat. No. 6,510,550 B1 to Hightower et al. and further in view of (On performance of Enterprise JavaBeans pages 1-11) to Pospisil et al.**

4. As to claim 1, Glass teaches a computer system for supporting communication between a plurality of users and at least one application server comprising: an application service program for receiving a client request from a client program executing on a computer associated with at least one of the users, a client interface program for communicating messages between said client program and said application service program, a service manager bean coupled to said application service program for creating and returning to said client program a handle to a functional bean appropriate to the client request, wherein the functional bean is configured to model a

business function (figures 9/10 Col. 15 Ln. 30 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60).

5. Glass is silent with respect to a data store interface for coupling said application service program to a data storage system and memory coupled to said application service program said memory for queuing customer requests and to service the queued customer requests in accordance with the code contained in the functional bean and for interfacing with the data storage system via the data store interface.

6. Hightower teaches memory coupled to said application service program, said memory for queuing customer requests and to service the queued customer requests in accordance with the code contained in the functional bean and for interfacing with the data storage system via the data store interface (Col. 8 Ln. 27 – 45).

7. It would have been obvious to one of ordinary skill in the art at the invention was made to combine the teachings of Hightower and Glass because the teaching of Hightower would improve the system of Glass by allowing client continuous use of local application 9Col. 8 Ln. 42 – 45).

8. Pospisil teaches to a data store interface for coupling said application service program to a data storage system (JDBC API page 3 lines 36 – 45).

9. It would have been obvious to one of ordinary skill in the art at the invention was made to combine the teachings of Pospisil and Glass because the teaching of Pospisil would improve the system of Glass by providing database updating (page 3 line 36 – 45).

10. As to claim 2, Glass teaches the computer system of claim 1 wherein the functional bean is accessible by a program running on the client via an EJBObject (figures 9/10 Col. 15 Ln. 30 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60).
11. As to claim 3, Glass teaches the computer system of claim 1 wherein the functional bean is a modified entity bean (figures 9/10 Col. 15 Ln. 65 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60).
12. As to claim 4, Glass teaches the computer system of claim 1 wherein the functional bean is configured to provide transactional persistence to a client transaction (Col. 16 Ln. 1 – 15).
13. As to claim 5, Glass teaches the computer system of claim 1 wherein the client is web based (figure 5 Col. 12 Ln. 1 – 20).
14. As to claim 6, Glass teaches the computer system of claim 1 wherein the client is an application, an applet, a servlet or a JSP that can communicate with an EJBObject's remote interface using RMI over TCP/IP or IIOP (Col. 16 Ln. 57 – 67).
15. **Claims 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.s. Pat. No. 6,629,128 B1 to Glass in view of (On performance of Enterprise JavaBeans pages 1-11) to Pospisil et al.**

16. As to claim 7, Glass teaches a computer system comprising a plurality of sets of functional beans each set comprising at least one functional bean assigned to perform a particular business method, the computer system comprising: a microprocessor/a memory device coupled to the microprocessor (inherent in figures 1/5), a service manager program coupled to the memory device and configured to receive a number of requests from at least one of a plurality of types of transactions from a plurality of clients (figures 9/10 Col. 15 Ln. 30 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60), the service manager program configured to obtain a handle to an instance of a functional bean based on a type of transaction requested by a client and the service manager program configured to return the handle to the client, wherein the client is configured to use the handle to interact with the functional bean to execute a business method, wherein the functional bean is configured to model a business function (figures 9/10 Col. 15 Ln. 30 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60) .

17. Glass is silent with respect to at least one of a plurality of resources, a load-sharing program coupled to the service manager program and configured to create instances of functional beans based on a criterion.

18. Pospisil teaches at least one of a plurality of resources, a load-sharing program coupled to the service manager program and configured to create instances of functional beans based on a criterion (scalability page 7 lines 20 – 30).

19. It would have been obvious to one of ordinary skill in the art at the invention was made to combine the teachings of Pospisil and Glass because the teaching of Pospisil would improve the system of Glass by optimizing resource usage (page 7 line 20 – 30).

20. As to claims 8-10, see the rejection of claim 7.

21. As to claim 11, Glass teaches the code of claim 10, further comprising instructions to receive the first request and the second request from the client via a computer network (figures 1/5/7/8/9).

22. As to claim 12, Pospisil teaches the code of claim 10, further comprising instructions to create a number of instances of functional beans of the particular type requested, said number being dependent on availability of resources (scalability page 7 lines 20 – 30).

23. As to claim 13, Glass teaches the code of claim 10, further comprising instructions that allow a functional bean to instantiate a second functional bean of a second type in order to execute the business logic contained in the second functional bean instance (Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60).

24. As to claim 14, Pospisil teaches the code of claim 10, further comprising: instructions that allow a client to create a session with an instance of a session Enterprise JavaBean and instructions that allow the session Enterprise JavaBean to

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provide access to invoke the business methods contained in the functional bean (page 2 lines 20 – 24, page 3 lines 1 – 2).

25. As to claim 15, Glass teaches the code of claim 10, further comprising: instructions to instantiate an entity Enterprise JavaBean, said entity Enterprise JavaBean containing logic that maps a particular entity, and methods to performing actions on the particular entity; and instructions to invoke the methods contained in the entity Enterprise JavaBean from the business methods contained in the functional bean (Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60).

26. As to claim 16, Pospisil teaches the code of claim 10, wherein the instructions to create an instance of a functional bean of the particular type requested further comprise: instructions to verify if required system resources are available (scalability page 7 lines 20 – 30).

27. As to claim 17, Pospisil teaches the code of claim 16 further comprising: if required system resources are not available, instructions to direct the computer processor to an existing instance of a functional bean of the particular type requested (scalability page 7 lines 20 – 30).

28. As to claim 18, Glass teaches a method comprising the steps of: creating a functional bean from an object-oriented middleware component, wherein the functional



bean is configured to model a business function figures 9/10 Col. 15 Ln. 30 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60), deriving a class with no data elements from the object-oriented middleware component and adding a set of computer-executable instructions to the derived class (Col. 18 Ln. 44 – 60).

29. Glass is silent with respect to the set of computer-executable instructions that is configured to provide transactional access to a pool of scarce system resources allowing client requests to be queued on EJB instances taken from the pool.

30. Pospisil teaches the set of computer-executable instructions that is configured to provide transactional access to a pool of scarce system resources allowing client requests to be queued on EJB instances taken from the pool (scalability page 7 lines 20 – 30).

31. It would have been obvious to one of ordinary skill in the art at the invention was made to combine the teachings of Pospisil and Glass because the teaching of Pospisil would improve the system of Glass by optimizing resource usage (page 7 line 20 – 30).

32. As to claim 19, Glass teaches the method of claim 18, wherein the object-oriented middleware component is an entity Enterprise JavaBean figures 9/10 Col. 15 Ln. 30 – 67, Col. 16 Ln. 1 – 15, Col. 18 Ln. 44 – 60).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-Ai can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles E Anya  
Examiner  
Art Unit 2126

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